Three-Bin System

Tools

Electric drill
Saw (circular or handsaw)
Hammer
Pliers

Materials

Lumber—Cut List

Cut lumber into the following lengths. Use untreated pine painted with a preservative or flat black paint. Measure and cut the pieces as you assemble them, to be sure they fit together correctly.

For Bins

1 pc. 2" x 6" x 108" (center joist)
2 pcs. 2" x 6" x 30" (headers)
2 pcs. 2" x 6" x 111" (outside joists)
2 pcs. 2" x 6" x 14 1/4" (brace blocks)
4 pcs. 1" x 6" x 33" (short floor boards)
8 pcs. 2" x 6" x 41 1/2" (corner posts)
24 pcs. 1" x 6" x 36" (partition boards)
6 pcs. 2" x 2" x 34" (inside door tracks)
2 pcs. 2" x 2" x 35 1/2" (outside door tracks)
1 pc. 2" x 6" x 96" (cut to fit for post blocks)
14 pcs. 2" x 6" x 34 1/2" (floorboards)
5 pcs. 1" x 6" x 111" (back boards)
18 pcs. 1" x 6" x 35 1/2" (door slats)
3 pcs. 1" x 3" x 35 1/2" (door slats)

For Lids

18 pcs. 1" x 6" x 31" (lid boards)
3 pcs. 1" x 2" x 36" (front battens)
3 pcs. 1" x 2" x 34" (back battens)
2 pcs. 1" x 2" x 11 1/4" (hatch battens)
2 pcs. 1" x 2" x 22" (header batten)

Hardware

For Bins

22 carriage bolts, 1/4" x 3 1/2", with nuts and washers
1 box 16d galvanized nails
1 box 8d galvanized nails

For Lids
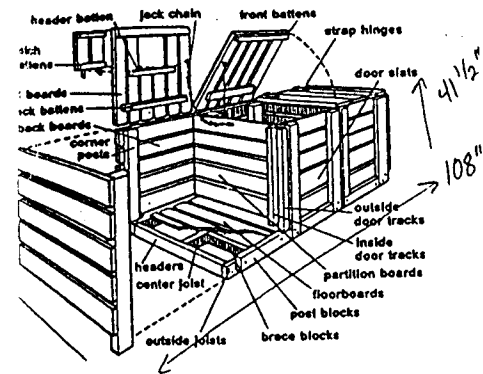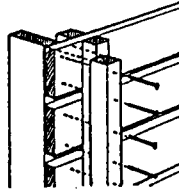
6 strap hinges, 8" (lids)
2 strap hinges, 4" (hatch)
4 lengths jack chain, approximately 36" each
8 heavy screw eyes
4 snap hooks
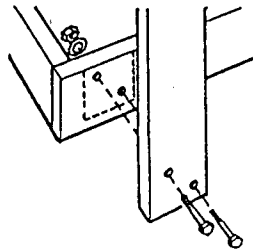1 box #6 x 1 1/4" galvanized screws

Building the Bins

1. Base. Nail a header to each end of the center joist, using 16d nails. Nail the outside joists, front and back, across the ends of the headers. Nail the brace blocks in place between the joists. Locate and nail the four short floorboards across the joists where the partitions will be located, using 8d nails, as shown.

2. Partitions. For each of the four partitions (two outside and two inside), nail six partition boards to connect two corner posts, spacing them evenly. Nail the inside door tracks to the partition boards, 1 inch back from the corner posts.

Nail the outside door tracks flush with the front of the two interior partitions. Position the assembled partitions – one on each end of the base and one on each side of the interior compartment; drill and bolt the corner posts to the outside joists.

3. Post Blocks. Cut the 2 by 6 by 96-inch post block board into three pieces, to fit snugly between the bottoms of the front corner posts.
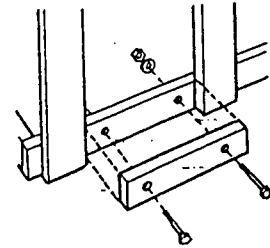

Bolt the post blocks in place, flush with the floor surface.

4. Floor. Space the floorboards evenly across the joists and nail them in place. There will be five for each of the end compartments and four for the middle compartment.
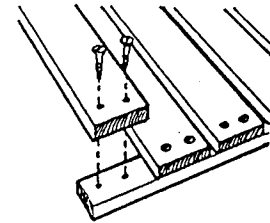
5. Back. Nail the back boards in place covering the back corner posts.

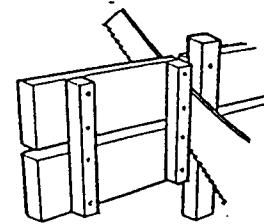**6. Front.** Feed door slats horizontally into the

Building the Lids

1. Lids. Construct two of the three lids. Using a drill and galvanized screws, fasten six lid boards to the front and back battens; allow about 1/2 inch between boards. Each lid will measure 36 inches across. Construct the third lid in the same manner, but leave out the two middle boards.

2. Hatch. Fasten the hatch battens to the two remaining lid boards, one batten about 2 inches from the end of the boards and one batten 18 inches from the same end. Fasten the header batten to the boards, 20 inches from the end, just behind the back hatch batten. Cut between the header batten and the back hatch batten to separate the hatch. Fasten the two remaining boards and the header batten to the partially constructed lid. Hinge the hatch to the lid.

3. Finish. Attach the three lids to the bins with the 8-inch hinges, so that they are centered over the compartments. Use screw eyes to attach a chain to the bottom of the lid for each of the two end bins. Attach the chains on the inside edge at about the middle of the boards, on the side near the center partition. Attach chains underneath both sides of the lid of the middle bin. Mount strap hooks on the ends of the chains. Use pliers to attach screw eyes to the bin partitions.